77. A system as in claim 48 further comprising means for optic compression of complementary screen raster elements for increasing the dot per inch resolution.

78. A system as in claim 48 further comprising partly transparent mirrors as light dividing elements.

REMARKS

This submission is in response to the Official Action dated January 15, 2002. Claims 48-50, 52, 55-61, 63, 67-69, 71, 73 and 76-78 are pending. For convenience, we have included a complete set of claims.

Applicant's attorney refers to the Advisory Action dated May 23, 2002. That document correctly sets forth a discussion between the Examiner and applicant's attorney, Gordon D. Coplein.

Upon reporting the results of the discussion to the client, who is overseas, and the client's further review of the application, it was decided the claims were not in the desired form. This necessitates the filing of the subject Request for Continued Examination.

The claims submitted are amended versions of the claims as they stood in the application prior to the Final Rejection dated January 15, 2002. It is noted that the Amendment After Final Rejection dated April 15, 2002 has not bee entered.

Further, claims 74-77 are added.

As agreed to in the discussion with the Examiner, claim 70 has been cancelled. It is replaced by new dependent claim 74.

It is noted that there is an outstanding objection to Fig. 2 of the drawings. A new Fig. 2 is being prepared by a draftsman and will be submitted upon its completion.

In view of the above amendments and remarks, it is respectfully requested that the application be reconsidered and that all pending claims be allowed and the case passed to issue.

If there are any other issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at the telephone number indicated below.

Prompt and favorable action is requested.

Respectfully submitted,

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MARK-UP OF SPECIFICATION FOR AMENDMENT
PURSUANT TO 37 C.F.R. §1.121

Page 23, lines 9-15

Laser [31] 26 produces coherent light 27 and after diffraction on hologram plane 31, produces a three dimensional (3-D) image formed by diffracted light 32. The image may be viewed directly or projected onto a large screen by a projection system. The use of three lasers, one for each color component, allows formation in the same way of a 3-D color image. As a holographic image restoring light may be also used that produced by mercury vapor lamp.

MARK UP OF CLAIMS FOR PRELIMINARY AMENDMENT

48. (Amended) An image display system comprising:

(a) at least one complimentary screen of one of light emitting or light source modulating devices in at least a two dimensional array of N (a real number) pixels, from which raster elements comprising one or more pixels are sequentially generated;

(b) a raster multiplying system comprising a plurality of optically connected light dividing elements, each said [light dividing] element to divide passing light beam into parts deflect a proportional part of a raster element of the complimentary screen as a light beam and transmit the rest of said beam to another light dividing element to simultaneously form copies of the generated raster elements, with said copies of said raster elements to be used in forming P blocks, each block generally comprising at least a two dimensional array of pixels;

(c) an array of controllable modulators to [simultaneously and] independently modulate each of the raster elements for each of said P blocks, each said modulator having an output to coincide with a block of the image; and

(d) a surface on which an image blocks of total number of Mpixels are formed [with a resolution of M pixels is formed] and displayed, comprised of

said P blocks, where the number M exceeds the number N and where said surface preceding components of (a), (b), (c), (d) are placed in the mentioned order of the light path of the complimentary screen.

49. (Not Amended) A system as in claim 48, comprising a plurality of modulators for each of said P blocks.

50. (Not Amended) A system as in claim 48, comprising a plurality of said complimentary screens.

52. (Not Amended) A system as in claim 48 wherein a lens raster matrix forms said raster multiplying system.

55. (Not Amended) A system as in claim 71 further comprising a plurality of said complimentary screens.

56. (Not Amended) A system as in claim 71 further comprising means for optic compression of generated raster elements for increasing the dot per inch resolution of a scanning light beam.

57. (Amended) A method for forming an image on an image display

surface by forming [of P] a plurality of constituent blocks of said image, so that the image is presented as comprised of a plurality of blocks, [a block having a two dimensional array of pixels,] comprising the steps of:

(a) providing at least one complimentary screen having at least a two dimensional array of N pixels from which raster elements of one or more pixels are [sequentially] generated with one or more of said raster elements to comprise a block of an image;

(b) using a raster multiplying system comprising a plurality of optically connected light dividing elements for [partly transmitting and partly deflecting] dividing incoming light beam into parts, each said light dividing element to separate a raster element corresponding [one] light beam into a plurality of beam components to simultaneously form copies of each said generated raster element with said copies of said raster elements forming P blocks, each block generally comprising at least a two dimensional array of pixels;

(c) transmitting the formed beam components to an array of controllable modulators to independently modulate each raster element copy the beam component corresponding to each raster element copy in accordance with control signals applied for each of said P blocks; and

(d) repeating the procedure successively generating other raster elements from said complimentary screen using the same light dividing elements to simultaneously form a modulated raster in [each of P] said blocks; and

(e) displaying [said P] image blocks of total number of M pixels on an image blocks display plane in the form of an image, said image having a resolution of M pixels, where M is greater than N.

58. (Not Amended) A method as in claim 57 further comprising the step of using a plurality of complimentary screens.

59. (Not Amended) A method as in claim 57 wherein a raster element comprises more than one pixel.

60. (Not Amended) A method as in claim 59, further comprising the step of subjecting a generated raster element to additional optical compression for increasing dot per inch resolution of a sensitive plane scanning beam.

61. (Not Amended) A method as in claim 57 wherein a raster element is of the size of only one pixel.

63. (Not Amended) A method as in claim 57 comprising the use of lens raster matrix instead of said plurality of light dividing elements.

67. (Not Amended) A method as in claim 73 wherein a raster

element comprises a plurality of pixels.

68. (Not Amended) A method as in claim 73 wherein a said raster element comprises any one pixel.

69. (Amended) A 3D holographic image display system comprising:

(a) at least one complimentary screen of one of light emitting or light source modulating devices in at least a two dimensional array of N (a real number) pixels, from which raster elements comprising one or more pixels are sequentially generated;

(b) a raster multiplying system comprising a plurality of passive and at least partly light transmitting elements to simultaneously form copies of said generated raster elements of a complimentary screen, with said raster element copies forming P blocks with each block generally comprising at least a two dimensional array of pixels;

(c) an array of controllable modulators to [simultaneously and] independently modulate each of the raster elements for each of said P blocks, each modulator having an output to coincide with a block of the image;

(d) a surface on which a hologram [comprised of said P] blocks [with a resolution] of total number of M pixels [is] are formed, where the number M exceeds number N and where said surface preceding components of (a), (b), (c) and

(d) are placed in the mentioned order of the light path of the complimentary screen; and

(e) a holograph generator for producing a 3D holographic image from said [hologram] surface.

Cancel claim 70 without prejudice and substitute therefor:

75. A method as in claim 57 further comprising generating 3D image from said image display surface.

71. (Amended) A system as in claim 48 used for image recording further comprising:

(e) a photosensitive plane on which an outer image to be recorded is produced, said outer image [presented] comprising a plurality of said blocks, each block being of a two dimensional array of pixels, and all said blocks comprising M pixels, where number M exceeds number N, and where said system components of (a), (b) and (c) are placed in the mentioned order of the light path of the complimentary screen; and

(f) means to scan said [information] outer image on said photosensitive plane into electric signals for recording.

73. (Not amended) A method as in claim 57 used for image

recording further comprising that the step of point (b) is followed by:

(f) converting the image information received on said plane by the projection of said beam components into P electric signals, one signal for one of said P blocks, for recording received information for P separate image elements; and

(g) repeating the procedure by successively generating other raster elements on said complimentary screen, to simultaneously scan each of P blocks.

Add the following claims:

76. A method as in claim 57 further comprising the step of subjecting raster elements of complementary screen to additional optical compression for increasing dot per inch resolution.

77. A system as in claim 48 further comprising means for optic compression of complementary screen raster elements for increasing the dot per inch resolution.

78. A system as in claim 48 further comprising partly transparent mirrors as light dividing elements.